

## PATENT ABSTRACTS OF JAPAN

(11)Publication number : 06-167812

(43)Date of publication of application : 14.06.1994

(51)Int.Cl.

G03F 7/038  
 C01B 31/00  
 G03F 7/004  
 G03F 7/008  
 H01L 21/027

(21)Application number : 04-343296

(71)Applicant : NIPPON OIL CO LTD

(22)Date of filing : 30.11.1992

(72)Inventor : AOKI NOBUO

## (54) PHOTOSENSITIVE MATERIAL COMPOSITION

## (57)Abstract:

**PURPOSE:** To provide a resist which has extremely high dry etching resistance, high resolution to various kinds of light sources and high sensitivity by using compsn. components contg. fullerene.

**CONSTITUTION:** The fullerene refers to carbon isotope named as a carbon cluster and its deriv. The carbon cluster includes molecular formulas C<sub>60</sub>, C<sub>70</sub>, C<sub>76</sub>, etc. A mixture composed of one kind or ≥ 2 kinds of such carbon clusters is usable as the carbon cluster. The photosensitive material compsn. consisting of such fullerene and a photosensitizing agent has extremely higher resistance to dry etching than the conventional photosensitive material and has 30 times to 50 times higher resistance to reactive ion etching using gaseous CF<sub>4</sub>. The film thickness of the photosensitive material compsn. is, therefore, reduced to one several 10 at the time of using this compsn. Consequently, the extremely high resolution and sensitivity are obtd.

## LEGAL STATUS

[Date of request for examination] 28.11.1997

[Date of sending the examiner's decision of rejection]

[Kind of final disposal of application other than the examiner's decision of rejection or application converted registration]

[Date of final disposal for application]

[Patent number] 2814174

[Date of registration] 14.08.1998

[Number of appeal against examiner's decision of rejection]

[Date of requesting appeal against examiner's decision of rejection]

[Date of extinction of right] 14.08.2003

Copyright (C); 1998,2003 Japan Patent Office